IN THE CLAIMS

Please amend the claims as follows:

1 (Currently Amended): A pulse detonation engine system ~~for driving a turbine~~, comprising:

a pulse detonation generator ~~section~~ including a detonation tube having a ~~tabular~~ tubular hollow section ~~for permitting~~ configured to generate a detonation wave ~~to be generated~~ therein during a combustion process of a mixture gas combined with a gas and a fuel, a gas supply section ~~for feeding~~ configured to feed the gas into the tubular hollow section of the detonation tube at a given time ~~intervals~~ interval, a fuel supply section ~~for feeding~~ configured to feed the fuel into the tubular hollow section of the detonation tube at the given time ~~intervals~~ interval, and an igniter ~~for igniting~~ configured to ignite the mixture gas in the tubular hollow section of the detonation tube; and

a ~~pulse detonation driven~~ turbine driven by impact energies of ~~detonations that~~ detonation waves intermittently generated in the tubular hollow section of the detonation tube; wherein

the pulse detonation generator further includes a bypass flow passage configured to directly provide a gas to the turbine in order to continuously operate the turbine.

2 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 1, wherein

the pulse detonation generator ~~section~~ further includes a shock alleviating section ~~that alleviates~~ configured to alleviate the impact energies of the ~~for protecting detonations~~ detonation waves in order to protect the ~~pulse detonation driven~~ turbine from directly receiving the impact energies of the ~~detonations~~ detonation waves.

3 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim [[1]] 2, wherein

the shock alleviating section includes a shock damper ~~for converting~~ configured to convert the impact energies of the detonation waves, released from an open end of the detonation tube, into compression ~~energies~~ energy of the gas, and to introduce the compression ~~energies~~ energy of the gas ~~is introduced~~ into the ~~pulse detonation driven~~ turbine.

4 (Cancelled).

5 (Currently Amended): A [[The]] pulse detonation engine system, ~~for driving the turbine according to claim 1, wherein~~ comprising:

a pulse detonation generator including a detonation tube having a tubular hollow section configured to generate a detonation wave therein during a combustion process of a mixture gas combined with a gas and a fuel, a gas supply section configured to feed the gas into the tubular hollow section of the detonation tube at a given time interval, a fuel supply section configured to feed the fuel into the tubular hollow section of the detonation tube at a given time interval, and an igniter configured to ignite the mixture gas in the tubular hollow section of the detonation tube; and

a turbine driven by impact energies of detonation waves intermittently generated in the tubular hollow section of the detonation tube, wherein

the ~~pulse detonation driven~~ turbine includes first and second turbines disposed on a common rotor shaft in opposition to each other to allow the impact energies of the ~~detonations~~ detonation waves to be dispersed onto the first and second turbines ~~whereby~~ such that the first and second turbines are driven while permitting forces, applied thereto ~~to the first and second turbines~~ in an axial direction, to cancel each other.

6 (Currently Amended): A [[The]] pulse detonation engine system, ~~for driving the turbine according to claim 1, further~~ comprising:

a pulse detonation generator including a detonation tube having a tubular hollow section configured to generate a detonation wave therein during a combustion process of a

mixture gas combined with a gas and a fuel, a gas supply section configured to feed the gas into the tubular hollow section of the detonation tube at a given time interval, a fuel supply section configured to feed the fuel into the tubular hollow section of the detonation tube at a given time interval, and an igniter configured to ignite the mixture gas in the tubular hollow section of the detonation tube;

a turbine driven by impact energies of detonation waves intermittently generated in the tubular hollow section of the detonation tube; and

a reformer ~~for reforming~~ configured to reform a first fuel into a second fuel, wherein

the fuel to be supplied to the fuel supply section of the detonation tube includes the second fuel that is reformed.

7 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 6, wherein

the first fuel includes a hydrocarbon fuel ~~comprised of natural gas, LPG and petroleum~~, an alcohol fuel, and [[or]] dimethyl ether, and the reformer reforms the first fuel into the second fuel containing hydrogen and carbon monoxide.

8 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 6, wherein

the second fuel that is reformed contains hydrogen at a ratio of 30 % and more.

9 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 6, wherein

the reformer ~~is introduced with~~ introduces waste heat recovered from the ~~pulse detonation driven~~ turbine for achieving reforming.

10 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 1, wherein

after a hot flow process, with a high temperature~~, resulting from the~~ after generating a detonation wave, the gas supply section is operative to permit a cold flow process that combines purging a combustion [[gases]] gas from the detonation tube and cooling at least one of the tubular hollow section of the detonation tube and the ~~pulse detonation driven~~ turbine by supplying the tubular hollow section of the detonation tube with a gas in excess of a given flow rate, ~~to be generated,~~ and is operative to alternately execute the hot flow process and the cold flow process.

11 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 1, ~~wherein~~ further comprising:

a waste heat recovery boiler configured to generate steam to pre-cool the ~~pulse detonation driven~~ turbine ~~is pre-cooled with steam generated by a waste heat recovery boiler~~.

12 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 1, further comprising:

an electric power generator ~~for converting~~ configured to convert a drive force generated by the turbine into electric power.

13 (Currently Amended): The pulse detonation engine system ~~for driving the turbine~~ according to claim 1, further comprising:

a shaft member rotated by motive power converted from drive force generated by the turbine.

14 (Currently Amended): A method of driving a turbine using a pulse detonation generator ~~engine system~~, the method comprising:

feeding a gas into a tabular hollow section of [[a]] the pulse detonation [[tube]] generator at a given time ~~intervals~~ interval;

feeding a fuel into the tubular hollow section of the pulse detonation [[tube]] generator at a [[the]] given time ~~intervals~~ interval;

igniting a mixture gas combined with the gas and the fuel in the tubular hollow section of the pulse detonation [[tube]] generator; [[and]]

~~permitting~~ generating a detonation wave ~~to be generated~~ in the tubular hollow section of the pulse detonation [[tube]] generator; and

driving the turbine by ~~introducing~~ impact energies of ~~detonations~~ detonation waves, intermittently generated in the tubular hollow section of the pulse detonation [[tube]] generator; and ~~into the turbine.~~

directly flowing a gas to the turbine through a bypass flow passage of the pulse detonation generator in order to continuously operate the turbine.

15 (Currently Amended): The method of driving the turbine according to claim 14, further comprising:

alleviating the impact energies of the ~~detonations for protecting~~ detonation waves in order to protect the turbine from directly receiving the impact energies of the ~~detonations~~ detonation waves.

16 (Currently Amended): The method of driving the turbine according to claim 15, wherein

the step of alleviating the impact ~~energy~~ energies comprises converting the impact energies of the ~~detonations~~ detonation waves released from an open end portion of the pulse detonation [[tube]] generator into compression energy of the gas, and introducing the converted compression energy of the gas into the turbine.

17 (Cancelled).

18 (Currently Amended): A [[The]] method of driving [[the]] a turbine ~~according to claim 14~~, including first and second turbines, using a pulse detonation generator, the method comprising:

feeding a gas into a tubular hollow section of the pulse detonation generator at a given time interval;

feeding a fuel into the tubular hollow section of the pulse detonation generator at a given time interval;

igniting a mixture gas combined with the gas and the fuel in the tubular hollow section of the pulse detonation generator;

generating a detonation wave in the tubular hollow section of the pulse detonation generator;

driving the turbine using impact energies of detonation waves, intermittently generated in the tubular hollow section of the pulse detonation generator, wherein ~~the turbine comprises first and second turbines, and wherein~~

the step of driving the turbine comprises dispersing ~~energy released from~~ the impact energies of the detonation waves into the first and second turbines, and driving the first and second turbines while permitting forces applied thereto in an axial direction to cancel each other.

19 (Currently Amended): A [[The]] method of driving [[the]] a turbine ~~according to claim 14, wherein~~, including first and second turbines, using a pulse detonation generator, the method comprising:

feeding a gas into a tubular hollow section of the pulse detonation generator at a given time interval;

feeding a fuel into the tubular hollow section of the pulse detonation generator at a given time interval;

igniting a mixture gas combined with the gas and the fuel in the tubular hollow section of the pulse detonation generator;

generating a detonation wave in the tubular hollow section of the pulse detonation generator;

driving the turbine using impact energies of detonation waves, intermittently generated in the tubular hollow section of the pulse detonation generator, wherein

the step of supplying the fuel comprises reforming a first fuel into a second fuel, and supplying the second fuel into the tubular hollow section of the pulse detonation [[tube]] generator at the given time ~~intervals~~ interval.

20 (Currently Amended): The method of driving the turbine according to claim 19, wherein

the first fuel includes one of a hydrocarbon fuel ~~comprised of natural gas, LPG and petroleum~~, an alcohol fuel, and [[or]] dimethyl ether, and the step of reforming the first fuel comprises reforming the first fuel into the second fuel containing hydrogen and carbon monoxide.

21 (Currently Amended): The method of driving the turbine according to claim 19, wherein

the step of reforming the first fuel performs reforming such that the resulting second fuel contains hydrogen at a ratio of 30 % [[and]] or more.

22 (Currently Amended): The method of driving the turbine according to claim 14, further comprising:

achieving a hot flow process with a high temperature after generating ~~as a result of~~ the detonation wave;

achieving a cold flow process by concurrently ~~executing to purge~~ purging a combustion [[gases]] gas from the tubular hollow section of the pulse detonation [[tube]] generator and ~~to cool~~ cooling at least one of the tubular hollow section of the pulse detonation [[tube]] generator and the turbine by supplying the tubular hollow section of the pulse

detonation generator a ~~stream of the~~ gas[[,]] in excess of a given flow rate~~, into the detonation tube~~; and

alternately ~~and repeatedly~~ executing the steps of achieving the hot flow process and the cold flow process.

23 (Currently Amended): The method of driving the turbine according to claim 14, further comprising:

pre-cooling the turbine with steam ~~delivered from a waste heat recovery boiler~~.

24 (Currently Amended): The method of driving the turbine according to claim 14, further comprising:

~~generating electric power by~~ converting drive force~~, resulting from~~ generated by the turbine[[,]] into electric power.

25 (Currently Amended): The method of driving the turbine according to claim 14, further comprising:

converting drive force ~~resulting from~~ generated by the turbine into motive power and transferring the motive power to a power shaft.